

aataaataaataaaaaatgtagccaa1ttgtatataaaatgagttctgattatctatataaataccaaagccatctgctc  
atctttaagcccccacaggccaaaagacactctctctttgttatctctctctctctcacttactttgctttgatccgcc  
atggctacgaaactcgaaagctccttaactttgccctttgtccaaatgcagcgctctaagccaaaccaaccttgcct  
tctccctctcgcgcgcacaaatcatctggctcgccatctctctcttattggacctatccgggtggacctgcttggggg  
aaatacctcttccggcgggttaatatccggttcatacaaaaaccggaaacgttattcccggtccaaaaggcttccctttg  
gttggagcatgtcacctatgtcaagcactctagctcacgcgaatcgctgatgcagctgagaaattcggagcc  
aagaggctcatggcttcagcttaggagagactcgcgtgatcgtaacgtgcaatcccgacgtagcgaaaagagatt  
ctgaatagcccgggttttgcgtatcgaccgggttaaaagaatcggcttactcactgatgtttaaacagagcaattggtttgc  
accacacgggtgttactggcgaacgctcgcggtatcgcttgaaccatctcttagtacaacaaatcagaaga  
gccgagacgcaacgacgagtgatctcaagccagatgggtgagtttcttgaaaaacagagtagtaacgaaccttg  
ttttgtcgtgagttgcttaaaacggcgtcgcttaacaacatgatgtgctctgtattcggacaagagtagcttgaaa  
aaaaccatgttgagttacgtgaaatggcgaagaagggtatgattgctcggaacgttgaaatggagctgatccctc  
cttggctatcggagtttgatccctcaaaagactccggctctagatgttccacactcgtaccaaaaggtaaaccgggtttgatc  
ccggattatccgaacaccgtaatcaaacccgggtatttgcctcgtgatttcgtcgagcttttgcctccctccatgggtc  
agataaattatccgaccggacataatcgccgttcttgggtatgcacaccatttttattgataatttcttaattatattt  
gttgaaaatttgccttaggattatttagattaaaacatgaaatttgagactcaatgtgacgctgttctggaataaataaagc  
attagaagttttttgtttgacatcaaaatttagaaattttagattttataacagtttctataaaaaagtactaaaatt  
tttgagttattatcacaggagatgatatcagaggaacacagacaggttgcggcttaatcagagtgatcctcgctagg  
atggtccttcacagatgacaaatcaacgggtacaaaacgagctggatcaagtagtccgggaaatcaagagcccta  
gatgaatctgacttggcttcactccatatctaacggctgtggtgaaagaagtattgaggcttcatcctccaggccca  
cttctatcatgggcccgttggccataacagacacgacgtggtgatggctcgtctgttccggcagggaaccacagcaat  
ggggaacatgtgggcccgtatcgcatgatccacacgttgggttgatcctttggagtttaaacctgagagggttcgtggc  
aaaagaagggtgaggtggagtttccggttcttgggtcggatttgagacttgacacttccgggtcgggtcgtcggattgc  
ccgggaagaactctgtttactacgggtatgtttggacggcgcgatgatgtacatgagtttgaatggggaccgtccg  
atggtaacggcgttgacttatctgagaaaactgaggcttcttgcgagatggctaactcttctcgtactaaattgcgcctg  
aggcgcagttaaaataaagaagctcatatgagaattagagattt  
[SEQ ID NO:1]

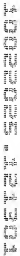
Figure 1

atggctacgaaactgaaagctccttaatctttgccctttgtccaaatgcagcgttctaagccaaaccaacctggcct  
 tctccctcctgcgcgcacaaatcatctggctcgccatatctctcttattggacctatcccgggtggacctgcttggggg  
 aaatacctctctcgccgggttaatatccgggtcatacaaaaaccgggaacggttatcccggtccaaaaggcttccctttg  
 gttggaagcatgtcactcatgtcaagcactctagctcaccgacgaatcgcgtgatgcagctgagaaattcggagcc  
 aagaggctcatggctttagcttaggagagactcgcgtgatcgtcacgtgcaatcccgacgtagcgaaagagatt  
 ctgaatagccccgtttttgctgatcgaccgggttaaagaatcgggttaactcactgatgtttaacagagcaattggtttgc  
 acccacacgggttactggcgaacgcttcgccgtatcgctcgaacctatctttagtataaaaacaaatcagaaga  
 gccgagacgcaacgacgagtgatctcaagccagatgggtgagtttctgaaaaacagagtagtaacgaacctcg  
 tttgttctgtgagttgcttaaaaaccggcgtcgcttaacaacatgatgtgctctgtattcggacaagaatgatgagcttgaaa  
 aaaacatgttgagttacgtgaaatggcgaagaagggtatgatttgcctggaacgttgaattggactgatcaccttc  
 ctggctatcggagtttgatcctcaagactccggtctagatgttccacactcgtaccaaaggtaaacccggtttgtatc  
 ccggattatatccgaacacccgtaatacaaacccggtgatttgcctcgtgatttgcctgacggttttgcctccccctcattggttc  
 agataaattatccgaccgggacataatcgccgttctttgggagatgatattcagaggaacagacacagttgcggtc  
 ttaatcgatggatcctcgcctaggtggtccttcatccagatatgcaatcaacgggtacaaaacgagctggatcaagt  
 agtcgggaaatcaagagccctagatgaatctgacttggcttcaactccatatctaacggcttgggtgaaagaagtat  
 tgaggcttcatcctccaggcccaacttcatcatgggcccggttggccataacagacacgatcgttgatgggtcgtctgtt  
 ccggcaggggaccacagcaatggtgaacatgtggccggtatcgatgatccacacgtgtgggtgatcctttggagt  
 ttaaacctgagaggttcgtggcgaagaagggtgaggttggaatttcggttctgggtcggattgagactgcacctt  
 cgggtcgggtcgtcggatttccccggggaagaatcttggtttactaccggtatgttttggacggcgatgatgttacatg  
 agtttgaatggggaccgtccgatggttaacggcgttgacttactgagaaactgaggttcttcgcgagatggctaact  
 ctctcctgcctaaattgcgccgttaggcgcagttaa  
 [SEQ ID NO:2]

Figure 2

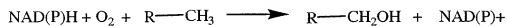
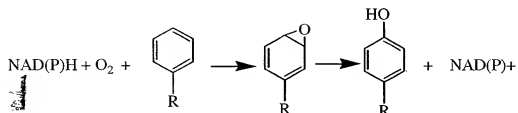
MATKLESSLIFALLSKCSVLSTQTNLAFSLLAVTIIWLAISLFLWTYPGGPAWGKYLF  
 GRLISGSYKTNVIPGPKGFPLVGSMMSLMSSTLAHRRADAAEKFGAKRLMAFSL  
 GETRVIVTCNPDVAKEILNSPVFADRPVKESAYSLMFNRAIGFAPHGVYWRTLRR  
 IASNHLEFSTKQIRRAETQRRVISSQMVEFLEKQSSNEPCFVRELLKTASLNNMMC  
 SVFGQEYELEKNHVELREMVEEGYDLLGTLNWTDLHPWLSEFDPQRLRSRCST  
 LVPKVNRFVSRIIEHRNQTGDLPRDFVDVLLSLHGSDDLSDPDIIAVLWEMIFRG  
 TDTVAVLIEWILARMVLHPDMQSTVQNELDQVVGKSRALDESDLASLPYLTA VVK  
 EVLRLHPPGPLLSWARLAITDTIVDGRLLVPAGTTAMVNMWAVSHDPHVWVDPLE  
 FKPERFVAKEGEVEFSVLGSDLRLAPFGSGRRICPGKNLGF TTVMFWTAMMLHE  
 FEWGPSDGNVDLSEKLRRLSCEMANPLPAKLRRRRS  
 [SEQ ID NO:3]

**Figure 3**





ALIPHATIC HYDROXYLATION



ALIPHATIC HYDROXYLATION

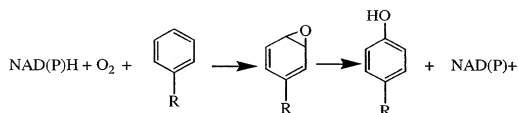
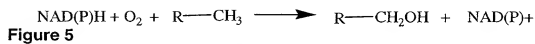
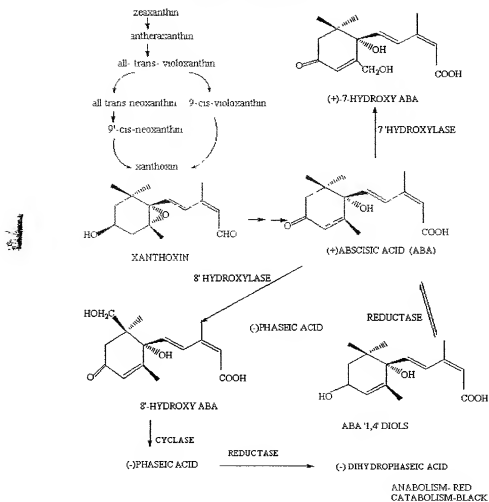


Figure 4

## METABOLISM OF ABA



## ALIPHATIC HYDROXYLATION

